

IV. *The genera of Coleoptera studied chronologically*
(1735-1801). By G. R. CROTCH, M.A.

[Read 3rd January, 1870.]

HAVING been engaged for some time in the preparation of a complete list of the genera proposed in Zoology, commencing naturally with the Entomological ones, I was very glad to see in the "Proceedings," a report of the interesting discussion on Mr. Kirby's paper (Proc. Ent. Soc. 1868, p. xlii). With Mr. Dunning's note (pp. xlv-xlviii) I agree entirely, and it has been suggested to me, that a brief sketch of my work, so far as relates to the *Coleoptera*, might not be uninteresting. All exact references, etc., are omitted, to appear in the work itself.

A genus appears to me to consist of but one species *necessarily*, viz. its type; round which we arbitrarily group any number of others, which may be removed at pleasure; it is therefore defined, not so much by characters, which vary with our knowledge, but by the selection of a type-species; from which I argue, that genera proposed in Catalogues, on *previously described* species, are entitled to priority. It is certainly far less productive of confusion, that a number of genera should be published, as in Dejean's Catalogue, with their species, than as in Latreille's "Précis," with their characters only.

In tracing the types of the various genera, I find that Linnæus apparently had no idea of types, and that his genera varied considerably in their extent. I have traced them from the first edition of the *Systema Naturæ* in 1735, which is, I think, the only consistent starting point, though possibly not the most desirable one; but certainly Linnæus and his contemporaries date the introduction of genera from that work, and in the tenth edition he mentions expressly, as a novel feature, that he now introduces *trivial names* also; (they had, however, been employed for five or six years in his various dissertations, etc.). It is, nevertheless, unfortunate that he should have changed his opinions as he did. Geoffroy, in 1762, seems to have had a clear conception of types, figuring the typical species always, as did also Schæffer four years later, adding rough dissections; these authors, therefore, settle most of the Linnæan genera. Fabricius never

gave any types (except a few in the *Entomologia Systematica emendata*) till his final work; where he generally gives the dissection of some one species. Olivier figures the typical species, with its details, in all cases, thus defining many Fabrician genera; unfortunately, he has two or three types in the larger genera. Latreille, however, with that breadth of view which distinguished him, at once saw that the mere multiplication of species had gone far enough, and in 1802 re-defined the existing genera, and added the typical species; this was still more marked in his fourth revision, or "*Considérations Générales*," in which he gives a simple list of genera, with the type species added. I would only mention further, that the utmost laxity prevails in the citations of genera, the references being singularly inexact in point of date; Agassiz's *Nomenclator*, perhaps the most careful work of the kind, has several hundred inaccuracies in the *Coleoptera* alone, the various works of Latreille being an especial stumbling-block.

1735. Linnæus in the first edition of his *Systema Naturæ*, gives twenty-three genera of *Coleoptera*, one other (*Lampyris*) being placed in the *Hemiptera*.

The principal species is generally indicated, but that this is not to be relied on, is shown by the list of Swedish species published in the following year, in the "*Acta Upsaliensia*," where their complete heterogeneity is manifest. The genera now founded are, *Blatta* (*Blaps mortisaga*), *Dytiscus*, *Meloe*, *Forficula* (including *Staphylinus*), *Notopeda* (*Alaus oculatus*), *Mordella*, *Curculio* (no type), *Buceros* (*Oryctes nasicornis*), *Lucanus*, *Scarabæus* (including *Dermestes*), *Dermestes* (*Necrophorus vespillo*), *Cassida*, *Chrysomela*, *Coccionella*, *Gyrinus*, (including *Haltica*), *Necydalis* (*Clerus formicarius*), *Attelabus* (*Tenebrio molitor*), *Cantharis* (*C. vesicatoria*), *Carabus*, *Cicindela* (*Buprestis mariana*), *Leptura*, *Cerambyx*, *Buprestis*.

Now on elucidating these further by the *Elenchus animalium*, we find *Dermestes* including *D. lardarius*, as it clearly ought to do, being an old name of Gœdart's for that species. *Necydalis* is a magazine, including *Rhagium*, *Clerus*, *Panagæus* and *Attelabus coryli*. *Attelabus* is almost worse, since besides *Tenebrio* it includes *Spondylis*, one *Elater*, and three *Chrysomelæ*. *Cicindela* includes the modern *Cicindela* and *Buprestis*. *Buprestis* consists of *Carabus* and *Callidium*.

1740. In the second edition the order of the genera is entirely altered; *Lucanus* and *Buceros* are merged in *Scarabæus*; in the *Hemiptera*, *Staphylinus* is used for the modern *Blatta*, despite the fact that Ray's *Staphylinus* was our *Ocypus olens*.

1747. In the sixth edition, *Gyrinus* and *Lampyris* are further suppressed, *Elater* supplants *Notopeda*, and *Tenebrio* is proposed for the original *Blatta* (the modern *Blaps*), a signification it long retained. *Necydalis* is now used for *N. minor*; *Buprestis* is transferred to the modern genus, plus *Spondylis buprestoides*; *Staphylinus* is used in the original sense of Ray.

1758. In the tenth edition only two genera are added, *Hister* and *Silpha*.

1762. Geoffroy, in his *Histoire abrégée*, divides the *Coleoptera* into fifty genera, displaying a degree of acumen far in advance of his age, which was but little appreciated by his contemporaries; the ill-concealed jealousy of Linnæus is only too evident in his twelfth edition. Olivier and Latreille succeeded in restoring the majority of Geoffroy's names, but there are still several which must be adopted. The new genera are—

Platycerus (*Lucanus cervus*), *Ptilinus*, *Copris*, *Attelabus* (= *Hister*, L.), *Byrrhus* (*Anobium domesticum*), *Anthrenus*, *Cistela* (*Byrrhus pilula*), *Peltis* (= *Silpha*), *Cucujus* (= *Buprestis*, L.), || *Buprestis* (= *Carabus*, L.), *Bruchus* (*Ptinus fur*), || *Cicindela* (*Telephorus fuscus*), *Omalisus*, *Hydrophilus* (*H. piceus*), *Melolontha* (*Clytra 4-punctata*), *Prionus*, *Stenocorus* (*Leptura meridiana*), *Luperus* [*Lyperus*], *Cryptocephalus*, *Crioceris* (*C. 12-punctata*), *Altica* (*Podagrica fuscipes*), *Galeruca* (*G. tanacetii*), *Mylabris* (*Bruchus pisi*), *Rhinomacer*, *Bostrichus* (*B. capucinus*), *Clerus* (*C. apiarius*), *Anthribus* (*Brach. scabrosus*), *Scolytus*, *Anaspis*, *Tritoma* (*Mycetophagus 4-pustulatus*), *Diaperis*, *Pyrochroa*, *Notoxus*, *Cerocoma*.

He also defines certain Linnæan genera as follows:—*Tenebrio* (*Asida rugosa*), *Curculio** (*Cleonus nebulosus*), *Staphylinus* (*Ocypus olens*), *Cerambyx* (*C. alpinus*), *Peltis* (*Silpha 4-punctata*), *Cucujus* (*Buprestis rustica*), *Elater* (*Ludius ferrugineus*), *Buprestis* (*Carabus auratus*), *Chry-*

* This was kept for *Cleonus* by Fabricius and Germar, and ought to be retained.

somela (*C. sanguinolenta*), *Cantharis* (*C. vesicatoria*), *Necydalis* (*Malthodes sanguinolentus*). These are all correct except *Tenebrio* (where Geoffroy's type was unknown to Linnæus), and *Necydalis*. *Platycerus* and *Peltis*, often attributed to Geoffroy, must either be rejected as synonyms, or, if allowed to remain, be quoted from Latreille and Illiger, who revived them. The others ought to be all retained.

1763. Scopoli proposes the genus *Laria* for *Bruchus pisi* and *Pria dulcamaræ*.

1766. Schæffer, in his *Elementa*, proposes *Telephorus* for *Cicindela* of Geoffroy.

1767. Linnæus, in his twelfth edition, proposes one new genus, *Hispa* (*H. atra*). He also revives *Lucanus*, *Gyrinus* and *Lampyris* from the first edition, and selects three of Geoffroy's 28 new genera to be retained, carefully altering the names even of these, viz., *Ptinus*, which includes *Byrrhus* and *Bruchus* of Geoffroy (*Byrrhus* being the type, as is apparent from the characters given); *Byrrhus*, which includes *Anthrenus* and *Cistela* of Geoffroy (*Anthrenus* being the type); and *Bruchus*, which is equal to *Mylabris* of Geoffroy. It would be difficult to imagine a more complete confusion than was caused by this procedure, and it only required Fabricius to give a third meaning to *Byrrhus* and *Ptinus* to render it perfect.

1772. Pallas, in his *Spicilegia*, proposed the genus *Ligniperda*, to include *Bostrichus capucinus* and *typographus*.

1774. De Geer, in his *Mémoires* (vol. iv.), proposed two new genera, both of which were rejected by Fabricius, and then re-created under other names. Attempts have been made to restore De Geer's names, but, as yet, without success. The two are, *Colliuris* (*Casnovia pennsylvanica*), and *Ips* (*Tomicus typographus*). Brullé restored the first, and Marsham the last.

1775. Linnæus, in his last publication, the *Bigæ Insectorum*, founded the genus *Paussus*.

Fabricius, in the *Systema Entomologiæ*, raised the number of genera to eighty-three, but if he had attended more to the labours of his predecessors, the nomenclature would not now be in an almost hopeless state of embarrassment. He rarely gives types, which are chosen

here from Olivier and Latreille. For example, he takes up the name *Byrrhus* from Geoffroy, and applies it to *Cistela*, Geoff., the *Byrrhus* of Linnæus being an *Anthrenus*. One could imagine he had never seen Geoffroy's work, since he cites his description and figure of *Mycetophagus 4-pustulatus* as a synonym to *Tritoma bipustulata*, F., and his description of *Byrrhus pilula* to *Dascylus cervinus*. In all, he adds 39 genera—

Trox, || *Melolontha* [nec Geoff.], *Trichius*, *Cetonia*, *Apate* (*A. muricata*), *Melyris*, *Anobium* [= *Byrrhus*, Geoff., *Ptinus*, Linn.], || *Byrrhus* [nec Geoff.; = *Cistela*, Geoff.], † *Ptinus* [nec Linn., = *Bruchus*, Geoff.], *Elophorus*, *Sphæridium*, † *Tritoma* [nec Geoff.], *Nicrophorus*, *Opatrum*, *Nitidula*, *Alurnus*, || *Cistela* [nec Geoff.], *Erotylus* (*E. fasciatus*, F., 1801), *Lagria*, *Zygia*, *Zonitis*, *Apalus*, || *Spondylis*, *Lamia* (*L. textor*, Oliv.), *Calopus*, *Rhagium*, *Saperda* (*S. populnea*, Oliv.), *Callidium* (*C. sanguineum*, Oliv.), *Donacia*, *Lymæxylon*, || *Cucujus* [nec Geoff.], *Malachius*, † *Necydalis* [nec Linn., = *Ædemera*, Oliv.], *Elaphrus*, *Scarites*, *Sepidium*, *Pimelia*, *Scaurus*, *Blaps*, *Helops*, *Erodius*, *Lytta* [= *Cantharis*, Linn.], || *Mylabris* [nec Geoff.], *Oxyporus*, *Pæderus*.

1777. Schæffer, in his Appendix, adds four genera, *Buprestoides* [= *Melasis*, Oliv.], *Cleroides* (*Clerus formicarius*), *Dermestoides* (*Orthopleura sanguinicollis*), *Elateroides* [= *Hylocoetus*]. Of these, the first is inadmissible; the others should be retained.

Fabricius, in his *Genera Insectorum*, adds no new genera, but adopting the name † *Ips* from De Geer, proceeds to apply it to a curious mixture of *Nitidula*, *Engis*, etc. The generic character given is still more embarrassing, as he says that they live in carcasses.

Scopoli, in his *Introductio*, adds the genus *Lethrus* for *Scarabæus cephalotes*, and in the Appendix he also adds *Gibbium* for a new species of *Ptinus*, Fab.

1778. Czempinski, in his *Dissertatio inauguralis*, also forms the last mentioned genus, under the name *Scotias*.

De Geer, in the seventh volume of his *Mémoires*, forms the genus *Antipus*, now regarded as a *Clytra*.

1781. Fabricius, in the *Species Insectorum*, adds the genus *Manticora*.

Pallas, in the first fasciculus of the *Icones*, proposes *Myrlaris* for *Tenebrio gigas*, L.; and *Silphoides* for *Scarabæus sabulosus* [= *Trox*, Fab.].

Laicharting, in the first volume of the *Verzeichniss*, re-names three genera, *Ostoma* [= *Nitidula*, Fab.], *Clytra* [= *Melolontha*, Geoff.], *Adimonia* [= *Galeruca*, Geoff.]. It is the custom to use this last name for *Galeruca tanacetii*, etc., but that is the type of Geoffroy's genus, of which *Adimonia* is a mere synonym.

Acharius, in the *Acta Holmiensia*, founds the genus *Bulbocerus* [= *Lethrus*, Scop.].

1783. Herbst, in his *Verzeichniss*, proposes two new genera, but the names of both were pre-occupied, || *Dermestoides* [= *Lyctus*, Fab.], and || *Silphoides* [= *Mycetophagus*, Hellw., *Tritoma*, Geoff.].

Piller, in the *Iter per Poseganam*, indicates four genera, three of which should be employed: *Meloides* [= *Cerocoma*, Geoff.], *Denticollis* [= *Campylus*, Fisch.], *Corticeus*, [= *Hypophlæus*, Fabr.], *Tenebrioides* (*T. mauritanica*, Lin., *complanata*, Pill.). This last is very useful, as *Trogosita*, Oliv., is always used wrongly, his type being *T. cærulea*, and consequently being co-extensive with *Temnochila*, Westw.

1784. Laicharting, in his second volume, adds the genus *Clytus* for *Callidium arcuatum*, etc.

Hellenius, in the *Acta Holmiensia*, proposes a new genus, *Serropalpus* (*S. striatus*).

Herbst, in his *Mantissa*, proposes *Lepturoides* [= *Denticollis*, Pill., *Campylus*, Fisch.], and *Pterophorus* [= *Lymexylon*].

Hochenwarth, in his *Beitrüge*, indicates by name only the genus *Clunipes* [= *Lethrus*, Scop.].

1787. Fabricius, in the *Mantissa*, proposes three new genera, *Brentus*, *Lycus* (*L. latissima*, etc.), and *Horia*. Olivier, in characterizing *Lycus*, took *Dictyoptera sanguinea* for the type, a species not in the Fabrician genus, which should be kept for *L. latissima*. He also (and in this he was followed by Fabricius) re-modelled *Horia* upon *H. maculata*, a species likewise unknown at the date of the foundation of the genus, which must have for its type *H. testacea*, and thus = *Cissites*, Latr.

Thunberg, in the *Museum Upsaliense*, proposes *Hydrous* for *H. piccus* [= *Hydrophilus*, Geoff.].

1788. Swederus, in the *Acta Holmiensia*, defines the genus *Cerapterus*.

1789. Thunberg, in his *Periculum Entomologicum*, describes three genera, *Auchenia* [= *Crioceris*, Geoff.], *Eurychora* (*E. ciliata*), and *Calolymus* [= *Lymeaxylon*, Fab.].

Olivier, in the fourth volume of the *Encyclopédie*, describes *Brachycerus* and *Macrocephalus*. He also, in the first volume of his *Entomologie*, describes the genus *Hexodon*.

1790. Fabricius, in the first volume of the Danish *Skriver*, describes six so-called new genera, of which two are merely appropriated from Geoffroy: || *Ligniperda* [nec Pallas, = *Sinodendron*, Hellw.], *Tetratoma*, *Diaperis* [Geoffroy], *Anthribus* [Geoffroy], || *Scolytus* [nec Geoffroy, = *Epactius*, Schn., *Omophron*, Latr.], *Hypophlœus* [= *Corticeus*, Pill.]. He selects *A. albinus* as a type of *Anthribus*, but it was not known at all by Geoffroy.

Preyssler, in his *Verzeichniss*, figures the genus *Claviger*.

Olivier, in the second volume of his *Entomologie*, adds six genera: *Trogossita* (*T. cœrulea*), *Scaphidium*, *Tillus*, *Drilus*, *Melasis*, *Cebrio*. † *Ips* is here used for the family *Colydiidæ*.

Scriba, in his *Journal*, forms the genus *Valgus*.

1791. Olivier, in the sixth volume of the *Encyclopédie*, describes the genus *Dryops* (type *D. auriculatus*), being thus a clear year in advance of Fabricius.

Schneider, in his *Magazin*, proposes several genera in the notes. *Platystomus* (*Curculio albinus* and *latirostris*), *Epactius* [*Scolytus*, Fab., nec Geoff.], *Rhynchites* (*R. Bacchus*, etc.).

1792. Bosc, in the *Journal d'Histoire Naturelle*, forms the genus *Ripiphorus* on *R. subdipterus*. Why this name has been transferred to *R. paradoxus* or *R. flabellatus* it is difficult to see; those species must retain the names *Metæcus* and *Emmenadia* respectively, and *Myodites* will disappear.

Olivier, in the third volume of his *Entomologie*, adds only two genera, *Cossyphus* and *Ædemera*. The type of

Edemera is unquestionably *O. femorata*, and the modern *Edemera* of Schmidt should be re-named. *Serropalpus* is here described from *Melandrya canaliculata*.

Fabricius, in the *Actes de la Societ  d'Histoire Naturelle de Paris*, describes several genera, some of which are quoted from his previous paper; many misprints appear to occur; the two new ones are *Cyloniium* and *Iyydus*, afterwards altered to *Colyidium* and *Lyctus*.

Fabricius, in the first volume of his *Entomologia systematica*, adds the genera *Parnus* [= *Dryops*, Oliv.], and *Heterocerus*. The latter is quoted from Bosc, who however has nowhere described it.

Hellwig, in Schneider's *Magazin*, characterizes *Mycetophagus* and *Synchyta*, the last being a name given to include three genera which he had formerly separated, and hence having no type.

Kugelann, in the same work, proposes the genus *Serrocerus* [= *Dorcatoma*, Herbst].

Schneider, also in the same work, proposes || *Elateroides* for *Hallomenus humeralis*, and || *Pentatoma* for *Liodes humeralis*; both names were, however, pre-occupied.

Herbst, in the fourth volume of his *Natursystem*, describes seven new genera: *Megatoma*, *Dorkatoma* (*D. dresdensis*), *Pselaphus*, *Korynetes* (*K. violaceus*), *Trichodes* [= *Clerus*, Geoff.], *Kryptophagus* (*Triplax aenea*), and || *Strongylus*. Of these *Strongylus* was pre-occupied; *Megatoma* was founded on a male character only, and had no type; Latreille accepted it, and changed the name to *Attagenus* (type *A. undatus*), then (1810) he formed it into a separate genus (type *M. serra*). *Corynetes* is identical with *Necrobia*, and does not include the *C. caeruleus*, De Geer. *Cryptophagus* is clearly formed on *Triplax aenea*, and has only two of the modern genus *Cryptophagus* in it, together with other forms; Paykull, who next defined the genus, gives the dissections from *Triphyllus punctatus*.

1793. Herbst, in the fifth volume, continues to establish eight new genera. *Latridius* (*L. longicornis*), *Kateretes* (*K. ater*), *Ryzophagus*, *Monotoma* (*M. striata*), *Bitoma* (*B. unipunctata*), *Eccoctogaster* [= *Scolytus*, Geoff.], *Platypus*, and *Triplax*. *Latridius* is certainly

formed on a *Corticaria*, *Cateretes* on an *Atomaria*, *Monotoma* is our modern *Synchyta* as is clear from Hellwig's paper, and *Bitoma* = *Lyctus*.

Fabricius, in the second volume of his *Entomologia*, adds five genera: *Sagra*, † *Dryops* [*nec Oliv.*], *Passalus*, *Molorchus* (*M. major*), and *Upis*. *Colydium* and *Lyctus* are only alterations from *Cylonium* and *Lygdus*. The type of *Colydium* is, however, *Aulonium sulcatum*, and not *C. elongatum*. *Lyctus* is heterogeneous, and has no type.

1794. Fabricius, in the Appendix to the same work, gives a new genus *Cychnus*, with erroneous characters.

Panzer, in his *Fauna*, briefly describes the genus *Halomenus* (*H. humeralis*).

Kugelann, in Schneider's *Magazin*, describes seven new genera: *Triaxus*, || *Volvoxis*, *Cychnus*, *Scymnus*, *Brachypterus*, *Hydræna*, and *Bryaxis*. The first of these has been used for *Throscus*, but a comparison of his description will show that he rather meant *Byturus*. *Bryaxis* is rather *Bythinus*, Leach, than anything else.

1795. Herbst, in his sixth volume, describes *Rhynchophorus* (*R. palmarum*).

Olivier, in the fourth volume of his *Entomologie*, describes *Necrobia* (type *N. violacea* = *cærulea*, De G.). Hence *Corynetes* and *Necrobia* have been just reversed.

Hellwig, in his edition of the *Fauna Etrusca*, defines *Endomychus*, *Rhynchites*, *Ptomaphagus* (*P. sericeus*), *Bolitophagus* (*B. agricola*). Thus *Ptomaphagus* is the earliest of the four names applied to *Catops*.

1796. Latreille, in the first of his works, the *Précis des Caractères Génériques*, enumerates 148 genera, twenty-one being new: *Geotrupes*, *Proteinus*, *Dacne* (*Engis humeralis*), *Choleva* [= *Ptomaphagus*, Hellw.], *Orthocerus*, *Eleodona* [= *Bolitophagus*, Hellw.], *Pedinus*, *Leiodes* (*Anis. picea*, Ill.), *Cnodalon*, *Pytho*, *Throscus*, *Dascillus*, *Elodes* (*E. pallidus*), *Uleiota*, *Cis*, *Phloiotribus*, *Cercus* [= *Brachypterus*, Kugel.], *Byturus* [*Triaxus*, Kugel.], *Lesteva*, *Drypta*, and *Stenus*. *Dacne* ought to be kept for *Engis*; *Pedinus* is founded on *Crypticus quisquilius*, which is left as the type in his two succeeding works; *Byturus* is at least as bad as Kugelann's genus, for he includes *Meligaethes* in it.

1797. Andersch, in Hoppe's *Taschenbuch*, proposes the name *Boleticola* for *Silpha grossa*, etc., which must be accepted.

Herbst, in his seventh volume, adds *Apion*, *Psoa*, *Kolon*, and *Boros*.

Thunberg, in the *Acta Holmiensia*, characterizes *Cordyle* [= *Rhynchophorus*, Herbst].

1798. Clairville, in the *Entomologie Helvétique*, proceeds to subdivide *Curculio* into several genera, viz., *Cossonus*, *Calandra* (*C. granaria*), *Cionus* (*C. blattarice*), *Rhynchænus* (*R. xylostei*), *Ramphus*, *Platyrhinus*, *Myceterus*. Of these, all are retained except *Rhynchænus*, which, however, must be, if priority is to be observed. *Rhinomacer* he defines from *Apion frumentarium*, and *Anthribus* from *Salpingus ruficollis*.

Fabricius, in his *Supplementum*, adds four genera, † *Geotrupes* [*nec* Latreille], *Onitis* (*O. clinias*, Sturm), *Lema* (*L. meridigera*, F., 1801), and *Dirceæ* (*L. barbatum*, F., 1801). He also gives as his own, *Endomychus* (Hellwig) and *Clytra* (Laicharting). *Lema* is co-extensive with *Crioceris*, Geoff., and *Dirceæ* identical with *Serropalpus*, Hellenius.

Illiger, in the *Verzeichniss der Käfer Preussens*, gives really tangible generic characters. The new genera are *Oryctes* [= *Buceros*, L.], *Aphodius* (*A. fossor*), *Anisotoma* (*A. glabra* and *humeralis*), *Agathidium* (= *Volvois*, Kug.), *Sarrotrium* [= *Orthocerus*, Latr.], and *Spercheus* (Kugel.). *Anisotoma* and *Leiodes* are interchanged by Erichson, and should be reversed. He proposed to use *Peltis* for *Silpha grossa*; Latreille (1803) objecting to this, proposed *Thymalus*. Kugelann appears to have had clearer ideas about the *Melandryadæ* than most people of his time, and proposed *Brontes* for *Serropalpus lavigatus* [= *Dirceæ*, Muls., *Hypulus*, Payk.] and *Mystaxis* for *S. dubius* and *bifasciatus* [= *Hypulus*, Muls.].

Paykull, in the first volume of his *Fauna*, forms five new genera, the types being carefully indicated: *Oducantha*, *Xylita* (*X. buprestoides*, Fab.), *Hypulus* (*H. 4-guttatus*), *Anthicus* (*A. monoceros*), *Catops* (*C. sericea*). *Hypulus* is evidently *Dirceæ*, Muls. (*nec* Fabr.) and *Brontes*, Kugel., hence *Hypulus*, Muls., might take

Kugelann's name *Mystaxis*. *Anthicus* = *Notoxus*, Geoff., and *Catops* = *Ptomaphagus*, Hellw.

Schrank, in his *Fauna Boica*, proposes four genera, *Pilularius* [= *Copris*], *Involvulus* [= *Rhynchites*], *Salius* [= *Rhynchænus* = *Orchestes*], *Gymnopterion* [= *Molorchus*].

1799. Creutzer, in the *Entomologische Versuche*, characterizes *Actinophorus* from *A. sacer*, etc., in which he was followed by Sturm, and has two years priority over Weber. He also proposes *Orchestes* for *Rhynchænus*, Clairv., and states that the MS. name *Pedetes* was likewise in use for it.

Cuvier, in his *Tableau Élémentaire*, proposes the genus *Platycephalus* [= *Aphodius*].

Herbst, in his eighth volume, adds three genera, *Akis*, *Machla* and *Stenosis*.

Fröhlich, in the *Naturforscher*, defines five genera as new, but his paper not being published for some years, he was preceded by others: *Leistus*, *Lithophilus*, *Agyrtes*, || *Luperus* [= *Ptomaphagus*], || *Adimonia* [= *Dascylus*, Latr.].

Paykull, in his second volume, adds || *Helodes* [*nec* Latreille], *Atopa* [= *Dascylus*, Latr.], *Cyphon* [= *Elodes*, Latr.], and *Dasytes* (*D. niger*).

1800. Paykull, in his third volume, further adds *Engis* [= *Dacne*, Latr.], and *Phalacrus* (*P. coruscus*).

1801. Fabricius, in his final work, the *Systema Eleutheratorum*, adds a number of new genera, for the most part with their types indicated: *Chelonarium*, *Platynotus*, *Melandrya*, *Galerita*, *Agra*, || *Hydrachna*, *Imatidium*, *Adorium* [= *Oides*, Weber], *Colaspis*, *Aegithus*, *Allecula*, *Cupes*, || *Brontes* [= *Uleiota*, Latr.], *Trachys*, *Æsalus*, *Gnoma*, *Megalopus*, *Hylesinus*, *Lixus*. He also uses † *Rhynchænus* (*nec* Clairv.) and † *Collyris* (*nec* De Geer).

Weber, in his *Observationes*, characterizes at length eight genera: *Ateuchus* [= *Actinophorus*], *Anthia*, *Tachypus* [= *Carabus*], *Calosoma*, *Brachinus*, *Oides*, *Eumolpus*, *Eumorphus*. Fabricius changed *Oides* into *Adorium*, but without giving any reason.

Lamarck, in his *Système*, proposes *Goliathus* for *Scarabæus Goliathus* [= *Hegemon*, Harris].

Knoch, in his *Neue Beyträge*, defines three new genera, *Cremastocheilus*, *Chlamys*, and *Sundalus*.

Brongniart, in the *Bulletin de la Société Philomathique*, describes the genus *Dasycerus*.

Palisot de Beauvois, in the *Magasin Encyclopédique*, describes the genus *Atractocerus*.

In accordance with the practice of Dr. Leconte, the sign || is prefixed to the names of genera previously occupied, and the sign † to names quoted erroneously from earlier authors.

NOTE.—I may refer here to a recent work of Mr. Thorell's on European spiders (Nov. Act. Ups. vii. 1.), in which he examines the question of nomenclature at some length. He shows that the trivial name was instituted by Linnæus in his *Philosophia Botanica* (1751), which date he accordingly recognizes; and for genera he adopts Sundevall's view, that the first edition of the *Systema Naturæ* (1735) must be recognized, "as being that in which for the first time real genera are arranged and defined consistently throughout the animal kingdom." In discussing the minor points, he considers that a name, if sunk as a synonym, does not become therefore free, but may only be used for a subdivision of the same genus. He admits also certain degrees of emendation of badly formed names, protesting altogether against hybrids and anagrams. Altogether the paper shows that a real study of nomenclature is gradually being inaugurated.
